Hernandez Valley Groundwater Basin

Groundwater Basin Number: 3-31

• County: San Benito

• Surface Area: 2,860 acres (4 square miles)

Basin Boundaries and Hydrology

Hernandez Valley is a sparsely populated elongate northwest-southeast trending basin in the Coast Range Mountains of San Benito County. The elevation ranges from approximately 2,300 to 2,600 feet. The basin is comprised primarily of Quaternary alluvium and a small area of Quaternary nonmarine terrace deposits. It is bounded to the northeast by Pliocene marine rocks, to the northwest by the Franciscan Formation, and to the north by Lower Miocene marine sediments. To the south and southwest are Upper Cretaceous marine sediments (Jennings and Strand 1958). The Hernandez Reservoir occupies most of the lower portion of the basin. It is interesting to note that the Hernandez Reservoir is operated primarily for groundwater recharge in the lower reaches of the San Benito River. The San Benito River and its tributaries drain the valley northwestward toward Hollister. Average precipitation values range from 19 to 21 inches.

Hydrogeologic Information

Water Bearing Formations

No specific published information on the water bearing deposits was found. San Joaquin District well completion report files contain logs for nine wells in the basin. These wells range in depth from 20 to 160 feet. They appear to only penetrate alluvial material.

Restrictive Structures

The fact that Hernandez Reservoir occupies most of the basin precludes the use of significant areas for groundwater development and likely acts as a significant recharge source for the remaining area.

Groundwater Level Trends

No data was found regarding water level trends. The only water level data found were in well completion report files for wells drilled in 1950 that reported groundwater levels at six feet below the surface.

Groundwater Storage

No published information on groundwater storage was found. The potential for abundant recharge from Hernandez Reservoir would indicate the basin is at maximum capacity.

Groundwater Budget (Type C)

There is no information to provide an estimate of this basin's budget.

Groundwater Quality

No groundwater quality information was found in the published literature or in DWR files.

Well Production characteristics

Well yields (gal/min)

Municipal/Irrigation

Total depths (ft)

Domestic Range: 20-160 Average: 58 (DWR well

completion reports)

Municipal/Irrigation

Active Monitoring Data

Agency Parameter **Number of wells**

/measurement frequency

Groundwater levels

NKD

Miscellaneous

NKD

water quality

0

Department of

Title 22 water Health Services and quality

cooperators

Basin Management

Groundwater management:

Water agencies

Public None

Private None

References Cited

California Department of Water Resources (DWR), San Joaquin District. Well completion report files.

Jennings, Charles W. and Rudolph G. Strand (compilers). 1958. Santa Cruz Sheet of Geologic Map of California. California Division of Mines and Geology (CDMG). Scale 1:250,000.